### Value of Construction Put in Place Survey (VIP)

# Monthly Subnational Construction Spending: Private Manufacturing

### Information about the Value of Construction Put in Place Survey (VIP)

The Value of Construction Put in Place Survey (VIP) provides monthly estimates of the total dollar value of construction work done in the U.S. The United States Code, Title 13, authorizes this program. The survey covers construction work done each month on new structures or improvements to existing structures for private and public sectors. Data estimates include the cost of labor and materials, cost of architectural and engineering work, overhead costs, interest and taxes paid during construction, and contractor's profits. For more information about the VIP Survey, including sample design, collection methodology, historic data, disclosure avoidance, and definitions, see here: Construction Spending (census.gov)

#### **Subnational Estimates**

The current VIP manufacturing estimates are published at the national level. In order to create subnational estimates, the current survey weights for manufacturing construction projects are summed within the standard region and division definitions to give the new estimates. All other survey estimation procedures, such as imputation methods, remain the same.

Region Name	Division Name	State
Northeast	New	Connecticut, Maine, Massachusetts, New Hampshire, Rhode
	England	Island, Vermont
Northeast	MidAtlantic	New Jersey, New York, Pennsylvania
Midwest	East North	Illinois, Indiana, Michigan, Ohio, Wisconsin
	Central	
Midwest	West North	Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota,
	Central	South Dakota
South	South	Delaware, District of Columbia, Florida, Georgia, Maryland,
	Atlantic	North Carolina, South Carolina, Virginia, West Virginia
South	East South	Alabama, Kentucky, Mississippi, Tennessee
	Central	
South	West South	Arkansas, Louisiana, Oklahoma, Texas
	Central	
West	Mountain	Arizona, Colorado, Idaho, Montana, Nevada, New Mexico,
		Utah, Wyoming
West	Pacific	Alaska, California, Hawaii, Oregon, Washington

## Quality of the Estimates

The VIP survey was designed to produce data at the national level and as such the estimates at subnational levels should be used with caution. The sample sizes for some of the regions or divisions may be very small and the variances may be larger than desired than for a survey designed to give estimates at those levels. The average division level Unit Response Rate (URR) is approximately 22.4% while the average imputation rate is 70.8%.

#### Disclosure Avoidance

The Value of Construction Put in Place Survey uses cell suppression as the primary method of disclosure avoidance.

Cell suppression is a disclosure avoidance technique that protects the confidentiality of individual survey units by withholding cell values from release and replacing the cell value with a symbol, usually a "D". If the suppressed cell value were known, it would allow one to estimate an individual survey unit's too closely.

The cells that must be protected are called *primary suppressions*.

To make sure the cell values of the primary suppressions cannot be closely estimated by using other published cell values, additional cells may also be suppressed. These additional suppressed cells are called *complementary suppressions*.

The process of suppression does not usually change the higher-level totals. Values for cells that are not suppressed remain unchanged. Before the Census Bureau releases data, computer programs and analysts ensure primary and complementary suppressions have been correctly applied.

The Census Bureau has reviewed the data product for unauthorized disclosure of confidential information and has approved the disclosure avoidance practices applied. (Approval ID: CBDRB-FY23-ESMD009-001)